

**Work Order ID 67958**

Tuesday, April 05, 2011 10:09:28 AM



Page 1

Item ID: D350-689-023

Accept



Setup Start



Revision ID:

Stop



Item Name: Energy Attenuating Floor Provisions

Start Date: 4/5/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 4/8/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

*M*

Date:

*11-04-5*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

DSI D9419

Rev A

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D350-689-023 CHG001

*6/11/04/27**11-04-5*

110

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

*JB**1**11/04/19*

120

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

*6/11/04/27**Q*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Item ID: D350-689-023

Accept



Setup Start



Revision ID:

Stop



Item Name: Energy Attenuating Floor Provisions

Start Date: 4/5/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 4/8/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130  Packaging	Packaging	0.00							
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D350-689-023 Location: _____ PPP Rev:								
140  QC	QC21- Final Inspection - Work Order Release	0.00							
Quality Control	Memo	0.00							

11/4/28

MF  
11-04-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

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Work Order ID: 67958

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions








Start Date: 4/5/2011

Required Date: 4/8/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 08-12-23 new issue DD verified by:EC  
route seq DD 10.02.12 vrified byJLM  
IPP Rev:B revise

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN960JD10  Washer	NAS1149D0363J	Purchased	No			110	Each	0.0000	9	9 ✓			
D3025-1  Beam		Manufactured	No			110	Each	2.0000	1	1			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST177				2					
				66571				2					
D3026-1  Channel		Manufactured	No			110	Each	4.0000	1	1 ✓			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST177				4					
				67349				4					
D3027-1  Clip		Manufactured	No			110	Each	29.0000	1	1 ✓			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST031				29					
				22566				29					
D3027-3  Clip		Manufactured	No			110	Each	21.0000	1	1 ✓			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST031				21					
				22566				21					

116583 x 9 JB

368627

JB

67349 x 1  
1 ✓

JB

22566 x 1  
1 ✓

JB 11/04/11

22566 x 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Page 2

Work Order ID: 67958

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 4/5/2011

Required Date: 4/8/2011

Start Qty: 1.00

Required Qty: 1.00

D3027-5 Manufactured No

110 Each

25.0000

1

1 ✓



Clip



JB L

Location

Loc Qty

Loc Code

ST031

25

22566

25

22566 x 1

D3027-7 Manufactured No

110 Each

13.0000

4

4 ✓



Clip



JB L

Location

Loc Qty

Loc Code

ST031

13

44566

2

44566 x 4

65828

11

D3234-1 Manufactured No

110 Each

8.0000

1

1 ✓



Doubler



JB L

Location

Loc Qty

Loc Code

ST233

8

44165

8

44165 x 1

D3234-3 Manufactured No

110 Each

9.0000

1

1 ✓



Doubler



JB L

Location

Loc Qty

Loc Code

ST233

9

44166

9

44166 x 1

D3811-041 Manufactured No

110 Each

4.0000

1

1 ✓



Seat Track Assembly



11/04/19

Location

Loc Qty

Loc Code

ST263

4

44697

4

44697

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Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Page 3

Work Order ID: 67958

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 4/5/2011

Required Date: 4/8/2011

Start Qty: 1.00

Required Qty: 1.00

MS20426AD4-5

Purchased

No

110

Each

5,949.000

14

14 ✓



Rivet

Location

Loc Qty

Loc Code

MEZZ

535

6733

535

ST317

5414

6874

5414

6874 x 14

34 ✓

MS20470AD4-5

Purchased

No

110

Each

1,936.000

34



Rivet, Universal Head

Location

Loc Qty

Loc Code

ST319

1936

116410

261

116893

1675

116410 x 34

18 ✓

MS20470AD4-6

Purchased

No

110

Each

892.0000

18



Rivet, Universal Head

Location

Loc Qty

Loc Code

ST319

892

116391

892

116391 x 18

32 ✓

MS20470AD5-6

Purchased

No

110

Each

1,748.000

32



Rivet

Location

Loc Qty

Loc Code

ST320

1748

105433

1748

105433 x 32

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Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Work Order ID: 67958

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 4/5/2011

Required Date: 4/8/2011

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

110

Each

2,051.000

9

9



Nut



JB

Location

Loc Qty

Loc Code

ST300

2051

116391

451

116540

800

116549

800

116391 x9

MS24694-S50

Purchased

No

110

Each

148.0000

9

9



Screw



JB

Location

Loc Qty

Loc Code

ST289

48

116304

48

ST298

100

116900

100

116304 x9

11/04/9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. A  
AND FLIGHT MANUAL SUPPLEMENT FMS-D350-689 REV. A  
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV. 0  
REF. CANADIAN STC: SH02-33  
REF. FAA STC: SR01620NY

## PURPOSE

The purpose of this DSI is to add the D350-689-021 Dual High Back Seat Installation, LH, the D350-689-023 Floor Provisions Kit and the D350-689-043 Dual High Back Seat Assembly to IIN-D350-689 Rev. A. The D350-689-021/-023 Kits are compatible with the Energy Attenuating Seat rails in later AS 350/355 model aircraft.

The DSI 9419-011 Kit includes the parts that are required to convert a D350-689-011 installation into a D350-689-021 installation.

**REFERENCE ONLY**

## PART LIST




-011	-021	-023	-043	P/N	DESCRIPTION
X				DSI 9419-011	ENERGY ATTENUATING CONVERSION KIT
	X			D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH
	1	X		D350-689-023	ENERGY ATTENUATING FLOOR PROVISIONS KIT
	1		X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY
			2	D3016-041	SEAT FRAME ASSEMBLY
			1	D3017-041	BACK FRAME ASSEMBLY
	1			D3018-1	SEAT CUSHION
	1			D3019-1	BACK CUSHION
			1	D3021-041	TUBE ASSEMBLY
			1	D3022-1	SEAT PAN
			1	D3023-1	BACK PANEL
			3	D3024-1	SPACER
		1		D3025-1	BEAM
		1		D3026-1	CHANNEL
		1		D3027-1	CLIP
		1		D3027-3	CLIP
		1		D3027-5	CLIP
		4		D3027-7	CLIP
			2	D3031-1	LOOP
1		1		D3234-1	DOUBLER
1		1		D3234-3	DOUBLER
2			2	D3808-041	SEAT RAIL ASSEMBLY
4			4	D3809-1	SLIDING BLOCK
1		1		D3811-041	SEAT TRACK ASSEMBLY

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY:   
D. SHEPHERD (DE # 02)

DATE: Aug. 19/2008  
CERT. NO.: SH02-33  
ISSUE NO.: 1

A	NEW ISSUE	RF	08.08.19
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO. REV. A	
MFG. APPR.	N/A	DSI 9419 SHEET 1 OF 5	
APPROVED		TITLE SCALE	
DE APPR.		ENERGY ATTENUATING PROVISION KIT NTS	
DATE	08.08.19	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



# REFERENCE ONLY

-011	-021	-023	-043	P/N	DESCRIPTION
			3	AN3-12A	BOLT
14		14		MS20426AD4-5	RIVET
34		34		MS20470AD4-5	RIVET
18		18		MS20470AD4-6	RIVET
		32		MS20470AD5-6	RIVET
			40	MS20600AD4W2	RIVET
			6	MS20600AD4W3	RIVET
9		9	23	MS21042L3	NUT (or MS21042-3)
			4	MS24693-S272	SCREW
8			8	MS24694-S3	SCREW
9		9		MS24694-S50	SCREW
4			4	MS24694-S148	SCREW
			4	MS27039-1-17	SCREW
			12	MS27039-1-19	SCREW
			23	NAS1149D0332J	WASHER (or AN960JD10L)
9		9		NAS1149D0363J	WASHER (or AN960JD10)

## PROCEDURE

1. Install the under floor structure as outlined in steps 1-18 of IIN-D350-689 Rev. A and DSI 9311 Rev. A as applicable, except do not install D3032-1 Spacers. Attach D3026-1 Channel to floor using (14) MS20426AD4 rivets. Ensure D3234-1/-3 Doublers are installed per DSI 9269 Rev. A.
2. Position the D3811-041 Seat Track Assy at LBL 27.33 as shown in Figure 1 to be in-line with the existing seat rails at LBL 8.98 and LBL 19.16.
3. Transfer the attachment holes from D3811-041 Seat Track Assy to aircraft floor (9 pls) using a  $\phi 0.201$  (#7 drill). Deburr holes. Install D3811-041 using (9) MS24694-S50 screws, (9) NAS1149D0363J washers, and (9) MS21042L3 nuts as shown in Figure 1. Torque screws to 20 to 25 in-lbs (2.3 to 2.8 Nm).
4. If converting a -041 Seat Assembly to a -043 Seat Assembly, remove D3028-1 Studs, D3029-1 Springs, and D3030-1 Locks from the D350-689-041 Seat Assembly. Install (2) D3808-041 Seat Rails Assemblies as shown in Figure 1 Detail A using (4) MS24694-S148 Screws. Torque screws to 100 to 140 in-lbs (11.3 to 15.8 Nm). Install D3809-1 Sliding Blocks using (2) MS24694-S3 screws as shown in Figure 1 Detail A. Torque screws to 12 to 15 in-lbs (1.4 to 1.7 Nm).
5. Remove screws from back end of Seat Tracks at LBL 27.33 and LBL 8.98. Slide D350-689-043 Seat Assembly into both seat tracks and lock in desired position using D3810-1 Retractable Spring Plungers. Re-install screws on back of seat tracks per the Aircraft Maintenance Manual.

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY:   
D. SHEPHERD (DE # 02)

DATE: Aug. 19/2008  
CERT. NO.: SH02-33  
ISSUE NO.: 1

DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<del>RF</del>	DRAWING NO.	REV. A
MFG. APPR.	N/A	<b>DSI 9419</b>	SHEET 2 OF 5
APPROVED	<del>RF</del>	TITLE	SCALE
DE APPR.	<del>RF</del>	<b>ENERGY ATTENUATING PROVISION KIT</b>	NTS
DATE <b>08.08.19</b>		<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

